Filing Date: June 26, 2003

Title: Method of Pre-Analysis of a Machine-Readable form Image

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## IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A method for a machine to perform of machine-readable form prerecognition analysis

comprising

preliminarily assigning at least one form object as a graphic image for identification of a spatial orientation of a form image,

preliminarily creating at least one spatial orientation model of the said graphic image for identification of the spatial orientation of the form image,

parsing the a form image into regions,

determining the spatial orientation of the form image, comprising: detecting on the form image at least one of said graphic images for identification of the spatial orientation of the form image;

- (b) determining the spatial orientation of the form image based on a comparison of the detected graphic image with the spatial orientation model,
- -(c) rotating the form image by 90°; and repeating step (c); in the case of said comparison between the detected graphic image and the spatial orientation model yielding a match that is below a predetermined level.
- 2. (Currently Amended A method of for a machine to perform machine-readable form prerecognition analysis

comprising

preliminarily assigning at least one graphic image in a form for identification of an image-form

preliminarily creating at least one model of the said graphic image for identification of the image form type,

parsing the a form image into regions,

determining an image form type for an-the image form image, comprising: detecting on the form image form at least one of said graphic images for identification of the image form type,

> (c) performing a primary identification of the image form image type based on a comparison of the detected graphic image with the said model, and

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(d) performing a profound analysis using a supplementary data said-primary identification results in multiple possibilities for the image form image type.

- 3. (Previously Presented) The method as recited in claim 1, wherein determining the spatial orientation comprises setting up and examining hypotheses and corresponding matching reliability estimations.
- 4. (Currently Amended) The method as recited in claim 2, wherein determining the image form image type comprises setting up and examining hypotheses and corresponding matching reliability estimations
- 5. (Currently Amended) The method as recited in claim 2, wherein determining the image form image type is performed using a minimum possible set of objects, defining the form type.
- 6. (Previously Presented) The method as recited in claims 1 or 2, wherein the at least one form object assigned as a graphic image comprises a non-text image.
- 7. (Previously Presented) The method as recited in claims 1 or 2, wherein the at least one form object assigned as a graphic image comprises a text image.
- 8. (Previously Presented) The method as recited in claim 7, wherein text in said text image is additionally recognized as a first step in the pre-recognition analysis.
- 9. (Previously Presented) The method as recited in claim 8, wherein the recognized text is used as supplementary data in a form type definition process.
- 10. Cancelled
- 11. (Previously Presented The method as recited in claims 1, wherein assigning comprises assigning a group of graphic images.
- 12. (Previously Presented) The method as recited in claim 6, wherein at least one is form object comprises an element of empty region type.

13. (Previously Presented) The method as recited in claim 6, wherein -at least one form object is of dividing line type.

- 14. (Currently Amended) The method as recited in claim 2, wherein the profound analysis comprises at least
  - assigning on to the form image at least one supplementary form element,
- creating a profound analysis model using the said model of the said graphic image for identification of the image form type plus at least one said supplementary assigned form element; and
  - performing a profound analysis of the form image using the said profound analysis model.

## 15. Cancelled

16. (Previously Presented) The method as recited in claims 11, wherein the entire group of graphic images is used for determining the spatial orientation.

## 17. Cancelled.

- 18. (Previously Presented) The method as recited in claim 1, wherein the said spatial orientation model is stored in a form model description.
- 19. (Previously Presented) The method as recited in claims 1 or 2, wherein at least one said form object, comprising the said graphic image is described in a form of an alternative.